

Work Order ID 153705

Thursday, November 24, 2016 2:58:06 PM

153705

Page 1

Item ID: D3204-041 Accept ***N900040100*** Setup Start ***NS1***
Revision ID: Stop ***NS2***
Item Name: Release Pedal Assembly
Start Date: 11/28/2016 Start Qty: 2.00 *?
Required Date: 12/5/2016 Req'd Qty: 2.00 *?
Reference: Cust Item ID:
Customer:

Approvals: Process Plan: **DAS 21 9-89** Date: **NOV 25 2016** Tooling: Date: Run Start ***NR1***
QC: Date: SPC (Y/N): Date: Stop ***NR2***

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D3204	Rev A1

100

0.00

100

Large Fab

Large Fab

Memo

0.26

Large Fab

1- Weld assembly as per Dwg D3204 using Jig D3204-041T1.
2- Drill #40 diameter hole in the center of Ø0.760" c'bore on D3204-5 arm prior to weld.
3- Use JB weld compound to plug the hole after assembly. 4- Grind JB weld flush after it is cured.

2 16-12-2

110

QC9- Inspect visual per QSI004- Fusion Welds

0.00

110

QC

Memo

0.00

Quality Control

① 16-12-06 **DAS 9 9-89**

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
Date :	Step #:	QTY Effective :		MRB (QSI042) Approval	
Description Work Order Deviation		Disposition		Completed By	
				Lead hand / Supervisor Approval Verification	
				QC / QA Coordinator Approval	
Root Cause Environment ☐ Design ☐ Doc/Data ☐ Equip/Tooling ☐ Handling/Pre ☐ Material ☐ Internal Transport ☐ Tribal Knowledge ☐ LOA ☐ Substation ☐ Past Expiry Date ☐ Misidentified ☐ No Re-verification ☐ Operator ☐ Offset/Setup ☐ Supplier ☐ Training ☐ Use for Testing ☐ Poor Information ☐ Rushing ☐ Product Improvement ☐ Process Improvement ☐ Manufacturing Process ☐ Past Due ☐		FAULT CATEGORY Pressure/Forced ☐ Bending ☐ Centre Not Concentric ☐ Cracks ☐ Crimp/Kink/Ripple/Wave ☐ Cuffs ☐ Crushing ☐ Heat Treat ☐ Wave/Twist in Tube ☐ Marks/Chatter ☐ Temperature/Cure ☐ Set-up ☐ BOM/Route ☐ Broken/Damage/Defect ☐ Inspection Incomplete/Unqualified ☐ Contamination ☐ Countersink ☐ Cut Too Short ☐ Instructions Incomplete/Unclear ☐ Drill Holes ☐ Power Loss/Surge ☐ Folio/Program ☐ Grain ☐ Weld ☐ Wrong Stock Pulled ☐ Out of Sequence ☐ Off-set ☐ Misabeled ☐ Fit/Function ☐ Misaligned/off center ☐ Positioned Wrong ☐ Outside Dimensions ☐ Over/Under tolerance ☐ Part Incorrect ☐ Part Lost/Missing ☐ Part Moved ☐ Drawing ☐ Finish ☐ Misread ☐ Turning Sequence ☐			
OTHER : _____					

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N900040100

Setup Start *NS1*

Stop *NS2*

Start Date: 11/28/2016 **Start Qty:** 2.00 ***2***

Cust Item ID:

Required Date: 12/5/2016 **Req'd Qty:** 2.00 ***~***

Customer:

Reference:

Approvals: **Process Plan:** _____ **Date:** _____ **Tooling:** _____ **Date:** _____

Run Start *NR1*

QC: _____ Date: _____ SPC (Y/N): _____ Date: _____

Stop *NR2*

**Insp.
Stamp**

0.00

120

QC

Memo

0.01

Quality Control

0.00

130

HandFinish

Memo

0.05

Hand Finishing

Grey Sandtex(Ref:4.3.5.6) per QSI005 4.3

0.00

140

Powdercoat

Memo

0.02

Powder Coating

***Cover holes for bushing**

START TIME:

OVEN TEMPERATURE:

FINISH TIME:

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____	DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐	AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐			
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Root Cause		FAULT CATEGORY			
Environment ☐	No Re-verification ☐	Pressure/Forced ☐	Temperature/Cure ☐	Power Loss/Surge ☐	Positioned Wrong ☐
Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐
Doc/Data ☐	Offset/Setup ☐	Centre Not Concentric ☐	BOM/Route ☐	Grain ☐	Over/Under tolerance ☐
Equip/Tooling ☐	Supplier ☐	Cracks ☐	Broken/Damage/Defect ☐	Weld ☐	Part Incorrect ☐
Handling/Pre ☐	Training ☐	Crimp/Kink/Ripple/Wave ☐	Inspection Incomplete/Unqualified ☐	Wrong Stock Pulled ☐	Part Lost/Missing ☐
Material ☐	Use for Testing ☐	Cuffs ☐	Contamination ☐	Out of Sequence ☐	Part Moved ☐
Internal Transport ☐	Poor Information ☐	Crushing ☐	Countersink ☐	Off-set ☐	Drawing ☐
Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐
Past Expiry Date ☐	Manufacturing Process ☐				
Misidentified ☐	Past Due ☐	OTHER :			

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N900040100

Setup Start *NS1*

Stop ***NS2***

~

Cust Item ID:

?

Customer:

Reference:

Run Start *NR1*

Stop ***NR2***

150

QC3- Inspect Part Finish

0.00

150

QC

Memo

0.00

Quality Control

DEC 07 2016

160

0.00

160

Small Fab

Small Fab

Memo

0.03

Small Fab

Install D3204-7 bushing as shown in Dwg D3204

170

QC5- Inspect part completeness to step on W/O

0.00

170

QC

Memo

0.01

Quality Control

DEC 08 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
Date :		Step #:		QTY Effective :				MRB (QSI042) Approval Completed By Lead hand / Supervisor Approval Verification QC / QA Coordinator Approval	
Description Work Order Deviation				Disposition					

Root Cause			FAULT CATEGORY								
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
Material	☐	Use for Testing	☐	Cuffs	☐	Contamination	☐	Out of Sequence	☐	Part Moved	☐
Internal Transport	☐	Poor Information	☐	Crushing	☐	Countersink	☐	Off-set	☐	Drawing	☐
Tribal Knowledge	☐	Rushing	☐	Heat Treat	☐	Cut Too Short	☐	Mislabeled	☐	Finish	☐
LOA	☐	Product Improvement	☐	Wave/Twist in Tube	☐	Instructions Incomplete/Unclear	☐	Fit/Function	☐	Misread	☐
Substation	☐	Process Improvement	☐	Marks/Chatter	☐	Drill Holes	☐	Misaligned/off center	☐	Turning Sequence	☐
Past Expiry Date	☐	Manufacturing Process	☐	OTHER : _____							
Misidentified	☐	Past Due	☐								

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Item ID: D3204-041**Accept*****N900040100*****Setup Start*****NS1*****Revision ID:****Stop*****NS2*****Item Name:** Release Pedal Assembly**Start Date:** 11/28/2016 **Start Qty:** 2.00***2*****Cust Item ID:****Required Date:** 12/5/2016 **Req'd Qty:** 2.00***2*****Customer:****Reference:****Approvals:****Process Plan:** _____**Date:** _____**Tooling:** _____**Date:** _____**Run Start*****NR1*****QC:** _____**Date:** _____**SPC (Y/N):** _____**Date:** _____**Stop*****NR2*****Sequence ID/
Work Center ID****Operation
Description****Set Up/
Run Hours****Tool ID****Tool #****Plan
Code****Accept
Qty****Reject
Qty****Reject
Number****Insp.
Stamp**

180

Identify as per dwg & Stock Location: GA

0.00

180

Packaging

Memo

0.00

Packaging

LOCATION : GA

2x16/12/08DAS
36
9-89

190

QC21- Final Inspection - Work Order Release

0.00

190

QC

Memo

0.03

Quality Control

16/12/08DAS
21
9-89

DEC 08 2016

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Design ☐	Operator ☐	Bending ☐	Set-up ☐	Folio/Program ☐	Outside Dimensions ☐				
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Tribal Knowledge ☐	Rushing ☐	Heat Treat ☐	Cut Too Short ☐	Mislabeled ☐	Finish ☐				
LOA ☐	Product Improvement ☐	Wave/Twist in Tube ☐	Instructions Incomplete/Unclear ☐	Fit/Function ☐	Misread ☐				
Substation ☐	Process Improvement ☐	Marks/Chatter ☐	Drill Holes ☐	Misaligned/off center ☐	Turning Sequence ☐				
Past Expiry Date ☐	Manufacturing Process ☐	OTHER :							
Misidentified ☐	Past Due ☐								

Picklist Print

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Work Order ID: 153705

153705

Parent Item: D3204-041

D3204-041

Parent Item Name: Release Pedal Assembly

Start Date: 11/28/2016

Required Date: 12/5/2016

Start Qty: 2.00

Required Qty: 2.00

Comments: IPP: C05.08.11Added Step 25 KJ/JLM

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
---------------------------------	------------------------	---------------	-------------	---------------------	------------------	-----------------	--------------------	----------------	-------------	--------------	---------------	----------------	--------

D3204-1

Manufactured No

100

Each

10.0000

1

2

D3204-1

Tube

EL 16-12-1

Location

Loc Qty

Loc Code

WA002

10

144635

10

D3204-11

Manufactured No

100

Each

7.0000

1

2

D3204-11

Plate

EL 16-12-1

Location

Loc Qty

Loc Code

WA001

5

152841

5

WA002

2

142724

2

D3204-13

Manufactured No

100

Each

8.0000

2

4

D3204-13

Gusset

EL 16-12-1

Location

Loc Qty

Loc Code

WA002

8

148611

8

4

DQA: _____ Date: _____

WORK ORDER NON-CONFORMANCE / UPDATE



QA Closed: _____ Date: _____

Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐					
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Root Cause				FAULT CATEGORY							
Environment	☐	No Re-verification	☐	Pressure/Forced	☐	Temperature/Cure	☐	Power Loss/Surge	☐	Positioned Wrong	☐
Design	☐	Operator	☐	Bending	☐	Set-up	☐	Folio/Program	☐	Outside Dimensions	☐
Doc/Data	☐	Offset/Setup	☐	Centre Not Concentric	☐	BOM/Route	☐	Grain	☐	Over/Under tolerance	☐
Equip/Tooling	☐	Supplier	☐	Cracks	☐	Broken/Damage/Defect	☐	Weld	☐	Part Incorrect	☐
Handling/Pre	☐	Training	☐	Crimp/Kink/Ripple/Wave	☐	Inspection Incomplete/Unqualified	☐	Wrong Stock Pulled	☐	Part Lost/Missing	☐
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Picklist Print

Page 2

Thursday, November 24, 2016 2:58:05 PM

Work Order ID: 153705

153705

Parent Item: D3204-041

D3204-041

Parent Item Name: Release Pedal Assembly

Start Date: 11/28/2016

Required Date: 12/5/2016

Start Qty: 2.00

Required Qty: 2.00

D3204-3 Manufactured No

100 Each 11.0000 1 2

D3204-3

Arm

EL 16-12-1

Location

Loc Qty

Loc Code

WA001

1

145631

1

WA002

10

150617

10

D3204-5 Manufactured No

100 Each 4.0000 1 2

D3204-5

Arm

EL 16-12-1

Location

Loc Qty

Loc Code

WA002

4

148254

4

D3204-7 Manufactured No

160 Each 13.0000 2 4

D3204-7

Bushing

16/12/07 DAS 36 9-89

Location

Loc Qty

Loc Code

GA

13

147440

13

D3204-9 Manufactured No

100 Each 4.0000 1 2

D3204-9

Pedal

EL 16-12-1

Location

Loc Qty

Loc Code

WA002

4

144594

4

Thursday, November 24, 2016 2:58:05 PM

Shop Packet Print

Page 2

DQA: _____ Date: _____



WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: _____ Date: _____

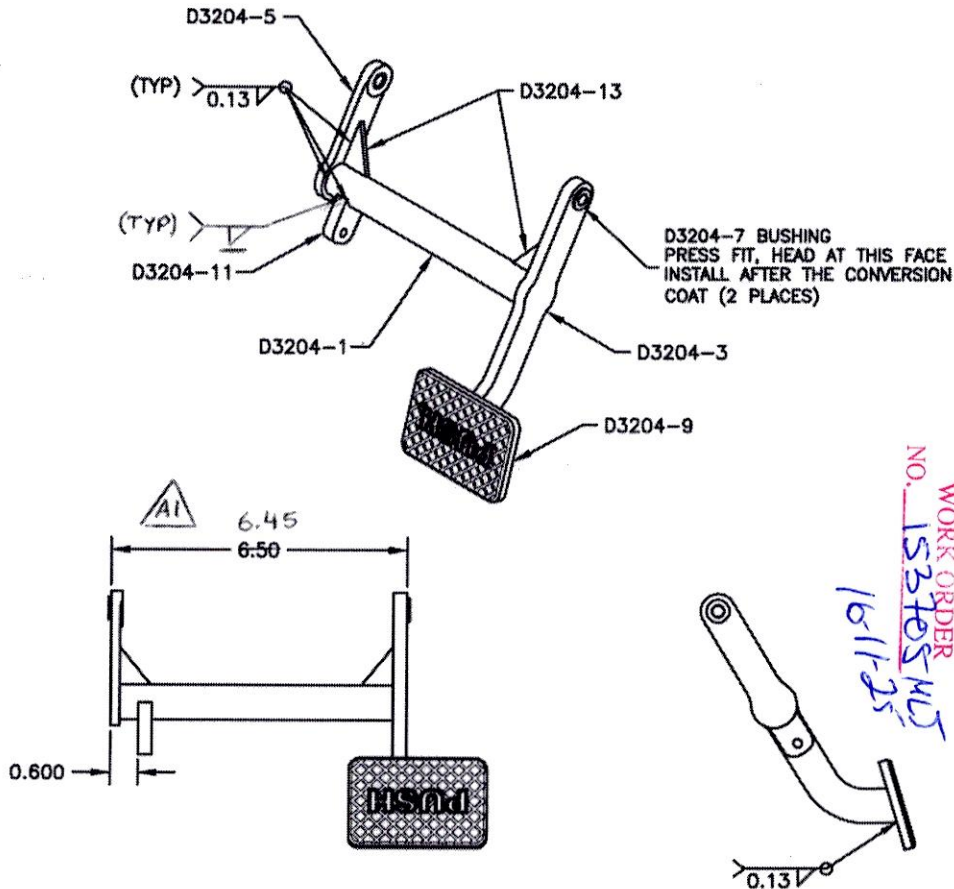
Work Order update only ☐

Work Order: _____ Part No. _____ NCR No. _____		DISPOSITION Rework ☐ Scrap ☐ Use-as-is ☐ Suspected Unapproved ☐		AGAINST DEPARTMENT/PROCESS Skid-tube ☐ Machining ☐ Thermoforming ☐ Large Fab ☐ Cross tube ☐ Small Fab ☐ Finishing ☐ Composite ☐ Water Jet ☐ Prod. Eng. Coord. ☐ Rec/Store/Packaging ☐ Supplier ☐ Engineering ☐ Quality ☐ Other ☐																																																														
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Misidentified ☐	Past Due ☐																																																																	

DART

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED	APPROVED	DRAWING NO. D3204	REV. A SHEET 1 OF 3
DATE 04.01.27		TITLE RELEASE PEDAL ASSEMBLY	SCALE NTS
A	04.01.27	NEW ISSUE	
AI	05.07.15	6.45 WAS 6.50	

RELEASED
04.04.30



SHOP COPY
RETURN TO
ENGINEERING
UNCONTROLLED COPY
SUBJECT TO AMENDMENT
WITHOUT NOTICE
WORK ORDER
NO. 153705 MLT
161125

D3204-041 RELEASE PEDAL ASSEMBLY

NOTES

- 1) BREAK ALL SHARP EDGES 0.005 TO 0.015
- 2) MATERIAL: 6061-T6 OR -T62 (QQ-A-200/8) 0.750 OD x 0.125 WALL (M6061T6T0.75W.125)
- 3) MATERIAL: 6061-T6 (QQ-A-200/8 OR QQ-A-250/11 OR QQ-A-225/8) BAR (M6061T6B)
- 4) MATERIAL: AISI 303 SS (M303R)
- 5) MATERIAL: 6061 (QQ-A-250/11) SHEET 0.125 THICK (M6061T6S.125)
- 6) ENGRAVE "PUSH" USING 0.5" HIGH LETTERS TO DEPTH OF 0.010 TO 0.020
ENGRAVE DART P/N USING 0.125 LETTERS TO MAX DEPTH OF 0.010
- 7) WELD ASSEMBLY PER QSI 004
- 8) CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
- 9) POWDER COAT ASSEMBLY GREY SANDTEX (REF. 4.3.5.6) PER QSI 005 4.3
- 10) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 11) ALL DIMENSIONS ARE INCHES

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